

ESDS Research Report

**The Relationship Between Financial Development
and the Legal Tradition of a Country:
Potential Guidelines for USAID Programs**

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The Relationship Between Financial Development and the Legal Tradition of a Country: Potential Guidelines for USAID Programs

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1. Summary of this Report

Following a review of possible ways for USAID and other donor agencies to support stock market development in low-income countries, this report applies three criteria to order preferences among the options. The criteria assume that each particular activity is worth doing, but consider the implications for broadly-based economic growth versus economic growth itself, the probability of change taking place even if USAID does not fund it, and the relative merits of IFC versus USAID assistance.

The rest of the paper elaborates upon the concepts of ?investor protections? and ?creditor protections,? discussing their link to an economic concentration of financial assets and their importance in explaining stock market size. Countries offer different investor and creditor protections -- often in response to their particular legal tradition -- and the result is typically different evolutionary paths for financial markets. Analysis of the data shows that the presence of about half the possible investor protections is associated with larger stock market capitalizations, but that the presence of more protections than that is not associated with increases in capitalization.

A final section offers some summary guidelines for USAID activities in stock market promotion. **The intent of this paper is to better focus USAID assistance for financial markets development.**

2. A Menu of Financial Sector ? Reforms?

Ever since the 1989 *World Development Report*¹ from the World Bank, economists and other theorists have devoted considerable resources to demonstrating that supporting the growth of financial markets in general, and stock markets in particular, are effective interventions in the global war on poverty.² As donor budgets dwindle, the push is on to find effective ways to spend the remaining money.

Given the premise that supporting the growth of stock markets and financial markets is a useful activity for USAID, the question remains: How best to support financial markets? There are three key criteria for answering this question:

- , Does the assistance favor broadly-based economic growth or simply economic growth *per se*?
- , Would the reform process or technical assistance have been likely to occur in the absence of USAID or another donor's funds?
- , Does USAID have a comparative advantage in the activity, particularly with respect to the programs of the International Finance Corporation (IFC) and its work in emerging markets?

Of course, the additional, but implicit, criteria by which to judge all possible donor activities is the expected benefit to improving the standard of living among the poor.

Why does the first criterion matter? Isn't it enough to promote economic growth and let the benefits spread to all parts of the economy? It might be enough to raise the average per capita income of a country, on the expectation that the average income of those in poverty will also rise, but that expectation is not a sure thing. If you *can* choose between economic growth that directly is broadly-based and economic growth that is only indirectly broadly-based, it seems an easy choice for USAID.

¹ The World Bank, *Financial Systems and Development: World Development Report 1989*, Oxford University Press, 1989.

² Probably the most cited, and correctly so, work has been by Ross Levine and his handful of collaborators. The overview article is Levine, ? Financial Development and Economic Growth: Views and Agenda,? *Journal of Economic Literature*, June 1997, (35:2) pages 688-726. A useful early work is Levine and Sara Zervos, ? Policy, Stock Market Development, and Long-Run Growth,? The World Bank, 1995.

Would it have happened anyway, or nearly the same way, in the absence of USAID or another donor? This criterion, of course, applies to any type of development assistance. It depends upon a judgment about the motives of different people in the economy, as well as an assessment of the context for institutional evolution.

Think of this criterion as presenting a scale for USAID options. If the change would have almost certainly taken place anyway, there is only a weak case for USAID funding. If the change would have likely taken place, but not certainly, this is a prime candidate for USAID funding which leverages private sector or host country funding. If the change would have likely not taken place in the absence of USAID activity, then this is a strong case for USAID funding of the entire activity.

Could the IFC do it as well, or even better? This criterion applies only to capital markets development activities, although it can be generally expressed as “Is there a multilateral institution that can do it as well or better?” As a quick tour of the IFC’s Web site (at <http://www.ifc.org/>) will attest, the IFC provides extensive technical assistance and financial support to develop capital markets: “The Technical Assistance Trust Funds Program (TATF) is one of the cornerstones of the IFC’s assistance effort. Through TATF, IFC hires consultants to conduct a broad range of technical assistance activities, from helping entrepreneurs develop project proposals to assisting with private sector institution-building.”³ In particular, the IFC advises “governments on fiscal, legal and regulatory matters and on the institutional structure required to develop a market-oriented financial sector. IFC has provided advice on the design and development of the general legislative environment, including basic company law, which is a prerequisite to capital market activities. IFC also offers technical assistance in establishing a regulatory framework for banking and non-banking financial institutions, including supervisory and enforcement entities and mechanisms....[R]equests for assistance have increasingly focused on improving securities market infrastructure, such as assessing options for trading and clearing and settlement functions.”⁴

Since 1988, the IFC’s TATF has carried out approximately US\$ 75 million in projects to assist developing countries in establishing securities regulation and other elements of stock markets and capital markets.⁵ In addition, the IFC has carried out advisory services for privatization and establishing an environment that is friendly to foreign investors. It should be noted that the TATF is funded by commitments by donors, rather than out of the IFC’s own resources. Therefore, the United States can choose to fund capital markets development through the TATF at the IFC, or through the Missions of USAID.

Bearing in mind these considerations, we can develop a list of possible ways to support stock

³ Source: <http://www.ifc.org/products/worktatf/worktatf.html>

⁴ Source: <http://www.ifc.org/products/services/workadvi/workadvi.html>

⁵ IFC, *Annual Report*, 1998, page 98.

market development in developing countries. Among the approaches that quickly come to mind are:

- < Technical assistance to improve the regulatory mechanisms, including the securities and exchange commission or its equivalent. Call this **Promoting Transparency**.
- < Projects to improve the financial sophistication of market participants. Call this the **Executive MBA Program**.
- < Implementation of computerized trading systems and the reduction of clearing/settlement times. Call this the **Technology Transfer**.
- < Technical assistance to transform institutions associated with the stock markets into self-regulatory organizations (SRO's). Call this **Institutional Convergence** because it assumes that a particular institutional philosophy or model fits all.
- < Technical assistance to develop secondary markets. Call this **Market Deepening**.
- < Technical assistance to develop mutual funds and other retail investors. Call this **Mutual Fund Promotion**.
- < Technical assistance for the legislature to reduce or eliminate taxes on securities transactions or capital gains from equity investments. Call this the **Tax Cut Plan**.
- < Technical assistance for the government to adopt specific protections for equity investors, such as one-share-one-vote or mandatory dividend payments. Call this **Investor Protection**.
- < Technical assistance for the government to adopt specific protections for creditors, such as giving secured creditors first priority during a bankruptcy or a legal reserve requirement. Call this **Creditor Protection**.

In addition, the manner in which privatization support is given can have implications for capital markets development, broadly-based economic growth, and poverty reduction. However, we'll just consider the capital markets agenda here.

Using the three criteria identified above, how does this list of possible projects shake out? We are taking as an assumption that they would all promote economic growth, and that this economic growth would probably have a positive effect on poverty reduction. However, we are not making the assumption that they would all contribute directly to broadly-based economic growth.

Perhaps we should elaborate on that last point. Economies, at the national level, are interconnected, but not tightly so. Prosperity in one region or sector may or may not spread to all regions and sectors. The prosperity of Bangkok in the early 1990s coexisted with abject poverty in Northeast Thailand, for example. The potential for an economic stimulus reaching all parts of the economy is partly due to the distributional context: a thousand investors who are made better off will have less of an impact than a hundred thousand who are made better off by the same total amount. Among other reasons, this is true because the income elasticity for imports rises with income and because a relative monopoly in the demand for labor depresses average wages.

Of course, no stock market development will ever be truly ?broadly-based.? Even in the United States, with high per capita income and large stock markets, stock ownership -- both directly

owning shares and indirectly owning mutual fund shares -- stands at 41 percent of all households.⁶ ?Broadly-based? might be a squishy term, but it should mean that at least half the population is involved, if not a higher percentage.

To generate a rough approximation of where these possible activities fall with respect to the three criteria, we can assume that none of them are opposed by the developing country government. In a context where the host government opposes certain items and favors others, the donor institution has fewer choices and less use for these three criteria. (Of course, we are also making the assumption that all are worth doing and would succeed if done.) Assuming host government support, then, we ask:

1. Does the activity support broadly-based economic growth? With respect to stock markets, if the asset distribution in a country is *already* broadly-based, then just about all of the listed activities would support broadly-based economic growth. However, in cases where the asset distribution is concentrated in a relatively few hands -- particularly the distribution of financial assets -- then many of the donor activities neither support nor work against broadly-based economic growth. If the shares listed on a stock market are controlled by a small number of wealthy individuals and foreign investors, then the Technology Transfer of a computerized trading system or the Executive MBA Program will not achieve broadly-based growth. Here's a thumbnail sketch of how each activity would affect or start up broadly-based economic growth -- assuming that the initial distribution of assets is unequal:

Impact on broadly-based economic growth:

Negative: Tax Cut Plan.

Neutral: Executive MBA Program, Technology Transfer, Institutional Convergence.

Possibly positive: Market Deepening.

Probably positive: Mutual Fund Promotion, Promoting Transparency.

Positive: Investor Protection, Creditor Protection.

The expectation that both investor protection and creditor protection lead to a more egalitarian distribution of financial assets is based on the following insight. When institutions and laws favor company management over either investors or creditors, then the only investors or creditors with the appropriate incentives are majority stakeholders or otherwise large, powerful individuals. For example, in some countries, a minority shareholder has no legal recourse to counter any kind of misfeasance by the management of the company. Changing the laws to empower minority shareholders is a type of investor protection that promotes broadly-based economic growth.

⁶ Arthur B. Kennickell, Martha Starr-McCluer, and Annika E. Sunden, ? Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances,? *Federal Reserve Bulletin*, January 1997, pages 1-24. Data are for 1995; data covering 1998 are due to be released by the end of 1999.

2. Would the activity have happened even if USAID did not fund it? Bearing in mind our assumption that the government is not opposed to any of the nine possible activities, we can sort out the list using this criterion. It might be useful to add an additional assumption, that the country either is *?ripe?* for stock market modernization or is at least the site of a stock market long in the tooth -- even if short on the listings. That should not be an onerous assumption, because no donor institution would think about promoting mutual funds for a stock exchange with only a few dozen listings, or trying to make transparent what is nonexistent.

Before doing a similar thumbnail sketch of the options, consider a few facts about most emerging stock markets. Even when they are small and pokey, such as in Bolivia, they possess relatively greater financial knowledge and means than most other sectors of the economy. Secondly, they almost always have a large potential for profits. For example, the advantages of computerized trading systems directly accrue to the brokers and listed companies. If that particular reform *?pays for itself,* then donors ought to let it. Thirdly, the stock exchange is a relatively convenient contact point for private sector foreign investment and technology transfer. In the name of business development, you would expect that PricewaterhouseCoopers would be much more likely to give a price discount to the Santo Domingo Securities Exchange in the DR than to do the same for an outfit promoting microfinance services.

As above, here's a thumbnail sketch on the probabilities that it would have happened anyway:

Probability of happening even if USAID or another donor did not fund is:

High: Tax Cut Plan, Executive MBA Program, Technology Transfer.

Medium: Mutual Fund Promotion, Market Deepening.

Low: Promoting Transparency, Institutional Convergence, Investor Protection, Creditor Protection.

What about the trio of activities that appear highly likely to happen anyway, even if the donors do not get involved? Well, bear in mind that we are assuming that the government is not opposed to the reform or activity, and that the market is *?ripe?* for it. In those cases, the computerized trading systems and some portfolio analysis seminars are driven by a private sector profit motive. As for cutting taxes -- well, no offense to the highly-paid consultants who walk a government through the steps, but it isn't exactly brain surgery. By contrast, the institutional changes implied by the four options rated as having a low probability of occurrence do represent a level of knowledge and commitment that may or may not exist in the absence of donor assistance. In the *?medium probability?* camp are the two activities where a good profit motive exists, but it might not be a motive for those with knowledge and means.

This table of probabilities is associated with some general rules of thumb about USAID or donor funding options. If the activity would likely take place without donor funding, rely on private sources of funds for the job. At the most, donors should offer seed money. If the probability of occurrence is only medium, this is a good opportunity for donor funds to leverage private sector funding.

If the probability of occurrence is low, then the case for full donor funding is stronger.

3. Would the IFC do a better job than USAID? As the earlier review of IFC activities made clear, the IFC is well-equipped to offer a variety of stock market development assistance tools. In addition, the heavy support it provides for privatization implies that it will have a presence in countries which have chosen to follow that policy path. Here's a thumbnail sketch of IFC versus USAID (or other donors) on each activity:

Relative strengths of IFC versus USAID:

IFC has the advantage: Executive MBA Program, Technology Transfer, Mutual Fund Promotion, Market Deepening.

Both institutions about even: Institutional Convergence, Promoting Transparency.

USAID has the advantage: Investor Protection, Creditor Protection, Tax Cut Plan.

On an institutional basis, the IFC can bring more expertise and resources to bear upon activities such as mutual fund promotion and market deepening. Additionally, the IFC is typically already working with private sector firms in the country, allowing it to better improve financial sophistication, computerize trading systems, or expand opportunities for mutual funds.

In the areas of legislative changes -- either for the investor/creditor protections or cutting taxes on capital gains -- USAID is far better equipped to assist a country. That USAID has a ?policy agenda? for reforms is hardly a secret and it can go about the business of assisting a government to change its laws more forthrightly. The IFC is far better equipped to play the role of ?technical advisor? on issues such as shortening clearance and settlement times.

In the table on the following page, I have summarized the three thumbnail sketches for the list of possible ways to promote stock market development. To highlight the results, I have used a star rating system for options that have a positive result on broadly-based economic growth: **★ = possibly positive; ★★ = probably positive; ★★★ = positive**

Table 1. Summary of Options for Promoting Stock Market Development

Option	Favor Broadly-Based Economic Growth?	Probability that it would happen anyway?	Is USAID better than IFC?
Promoting Transparency	ÚÚ	Low	Even
Executive MBA Program	neutral	High	No
Technology Transfer	neutral	High	No
Institutional Convergence	neutral	Low	Even
Market Deepening	Ú	Medium	No
Mutual Fund Promotion	ÚÚ	Medium	No
Tax Cut Plan	negative	High	Yes
Investor Protection	ÚÚÚ	Low	Yes
Creditor Protection	ÚÚÚ	Low	Yes

Given this set of judgments, it is relatively easy to identify priorities for USAID assistance within the scope of support for stock markets development. If the criterion is used that USAID act where the IFC is relatively less able, three options are favored: getting the country to eliminate capital gains and securities transactions taxes, reforming laws to establish investor protections, and reforming the laws to establish creditor protections. However, cutting those taxes is negative with respect to broadly-based economic growth and has a high probability that it would have happened in any case.

Starting from the criterion that USAID should fund activities that have a low probability of occurring otherwise favors promoting transparency, institutional convergence, investor protections, and creditor protections. Neither USAID nor the IFC really has an edge with respect to promoting transparency or institutional convergence, so investor/creditor protections have only a small edge on that score. With respect to favoring broadly-based growth, institutional convergence is neutral and so the other three options look more promising for USAID.

Finally, if the starting point is favoring broadly-based economic growth, then promoting transparency, mutual fund promotion, investor protections, and creditor protections, are all favored options. However, the IFC has an edge on mutual fund promotion activities and mutual funds have at least a middlin? chance of blooming on their own, anyway.

Virtually any combination of these three criteria suggests that *if stock market development is to be a donor activity*, then USAID should focus on helping countries to provide investor protections, provide creditor protections, and promote transparency in stock market regulations and institutions.

The rest of this report will cover the topic of Investor Protections and Creditor Protections in greater depth.

3. More on Investor & Creditor Protections: The 'Law & Finance' Paper

Research by a team of economists and published by the NBER as 'Law and Finance' found evidence of a significant relationship between the roots of a country's legal tradition and the nature of its financial system development.⁷ This report summarizes their arguments, and provides additional information on the relationship between finance and law.

The L&F report examined four distinct legal traditions from which commercial laws typically derive:

- < English common law
- < French civil law (from the Napoleonic Codes 1804-7)
- < German civil law (Bismarck Codes 1897)
- < Scandinavian civil law (Swedish Codes 1600-1800)

in forty-nine countries and considered the quality of the protection afforded investors, either holders of equity shares or secured creditors. The authors examined company laws and bankruptcy/reorganization laws.⁸ Among the questions posed is whether differences in legal structure might explain different patterns of financial ownership.

The authors of the paper lament the lack of systematic data on corporate governance law structures around the world. They have established a data set covering the rights of investors, as well as the quality of law enforcement, in forty-nine countries. The central question on investor rights is 'how easily can investors exercise their rights *vis-a-vis* management'?

Sources for their data set include:

- < commercial codes and statutes from individual countries
- < investor guides published by firms such as Price Waterhouse
- < company registers from individual countries
- < *Moody's International Company Data*
- < publications from The Economist Intelligence Unit
- < advisory reports from international banks
- < the Swiss-based International Society of Securities Administrators
- < publications from the Investor Responsibility Research Center (IRRC)

⁷ Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 'Law and Finance,' National Bureau of Economic Research Working Paper 5661, July 1996. The full text of this paper is provided in an appendix.

⁸ Bankruptcy and reorganization laws are part of the commercial codes in civil law countries, but are typically separate Acts in common law countries.

- < *World Scope Global* from Disclosure, Inc.
- < Dun & Bradstreet's *The World Marketing Directory*
- < *CIFAR's Global Company Handbook*

They do not appear to have used the *Factbook* or other publications from the International Finance Corporation. The IFC provides a rating on several dimensions of investor protection, including the availability of shares to foreign investors, withholding taxes, and disclosure requirements. In addition, the IFC *Factbook* presents ratings from the Global Securities Consulting Services, Inc., with respect to benchmarks for safekeeping, settlements, and operational risks. In Appendix A of this report, the data set of the "Law and Finance" authors will be compared with ratings from these other sources.

The classification of the forty-nine countries is from a 1989 publication, *Foreign Law: Current Sources of Codes and Basic Legislation in Jurisdictions Around the World*. Although many countries, particularly in the European Union, might start out in one legal tradition and shift at least partially toward another, the classification is taken as a good approximation.

Table 2. Legal Traditions of Countries in the L&F Study

English Common	French Civil	German Civil	Scandinavian
Australia	Argentina	Austria	Denmark
Canada	Belgium	Germany	Finland
Hong Kong	Brazil	Japan	Norway
India	Chile	South Korea	Sweden
Ireland	Colombia	Switzerland	
Israel	Ecuador	Taiwan	
Kenya	Egypt		
Malaysia	France		
New Zealand	Greece		
Nigeria	Indonesia		
Pakistan	Italy		
Singapore	Jordan		
South Africa	Mexico		
Sri Lanka	Netherlands		
Thailand	Peru		
United Kingdom	Philippines		
United States	Portugal		
Zimbabwe	Spain		
	Turkey		

Uruguay		
Venezuela		

The authors concede that the relationship between legal rules and economic outcomes is possibly obscured by the degree to which legal rules endogenously adjust to economic reality. For example, if a country's development is driven by reliance on bank finance, it might have been that political choices dictated that course- and that the country changed its laws and regulations in response to that choice. This point, if true, would argue that economic outcomes change the legal environment, rather than the other way around.

Both this report and the L&F paper basically ignore that possibility. On this point, the L&F authors argue that their focus on the "legal tradition" is well-grounded. Countries typically adopted their legal traditions either involuntarily -- as a result of being conquered or colonized -- or voluntarily, but on the basis of affinity of language and not as a cognizant response to economic choices. On that basis, the authors consider the legal tradition of a country to be exogenous to its economic development.

4. What indicators are used to measure investor and creditor protection?

The following two tables summarize the broad categories of rights, or protections:

Table 3. Investor Protections, or Shareholders' Rights

Shareholders ? Rights	Definition or Comment	
One-share-one- vote rule	Country scores 1 point if laws require that ordinary shares carry one vote each, or if law prohibits multiple- or no-vote shares, as well as prohibiting firms from setting maximum number of votes	
Proxy voting by mail	Country scores 1 point when it is allowed. When no proxy by mail is allowed, it is more difficult for shareholders to exercise ownership rights	These five are combined into a composite indicator called: Anti- director Rights
Shares blocked before meetings	Country scores 0 points if country allows firms to require that shares be ?deposited? in the period prior to the shareholder meeting in order to be able to vote at meeting; scores 1 point otherwise	
Cumulative voting	Country scores 1 point if allowed because it gives minority shareholders more power to get their representatives on a board; zero otherwise	
? Oppressed? minority shareholders have legal mechanisms	Country scores 1 point if laws permit minority shareholders either a judicial way to sue the management, or a requirement that company buy their shares if they disagree with a major decision, <i>e.g.</i> , mergers; scores zero otherwise.	
Power to call an Extraordinary Shareholders Meeting (ESM)	Minimum percentage of share ownership needed to call an ESM; in the 49 countries, it ranges from zero to 33 percent. Country scores 1 point if the minimum is ten percent or less; scores zero otherwise.	
Mandatory Dividend Requirements	Percentage of net income that firms are required to distribute as dividends to their ordinary shareholders. If no restrictions exist, this variable is zero.	

Table 4. Creditor Protections, or Rights

Creditors? Rights	Definition or Comment
Restrictions on filing a reorganization petition	Country scores 1 point if the reorganization procedure requires creditors' consent on filing for a reorganization, or it places a similar constraint. If there are no restrictions, the score is zero.
Automatic stay on secured assets	Country scores 0 points if procedures require an automatic stay on assets of the firm filing for reorganization; this requirement would prevent creditors from gaining the possession of their security. If this requirement does not exist, country scores 1 point.
Secured creditors given first priority	Country scores 1 point if secured creditors get top ranking in distribution of proceeds from bankrupt firm; zero if others, <i>e.g.</i> , workers or the Government, get first priority. Most countries do not put workers and the Government first, but examples of those that do include Mexico and other Latin American countries.
Management stays in place	Country scores 0 points if the management of a firm retains administrative control during reorganization; scores 1 point if not, or if an appointed official takes over the operation during reorganization. Note that this power given to managers is referred to as "Chapter 11" in the United States. In some other countries, management does not have this power but can only go into reorganization if creditors approve.
Legal reserve requirement	Percentage of total share capital mandated by law to avoid dissolution of firm; zero if no restriction applies. Where this restriction exists, firms are required to maintain a certain level of capital, or be faced with the possibility of automatic liquidation. This is a form of creditor protection, because it keeps insiders from stealing or ruining all the capital before creditors can repossess it.

5. What indicators are used to measure ? enforcement of investor or creditor rights? ?

The next table presents the indicators selected to consider just how well the rights are enforced. The L&F authors rely upon country-risk rating groups such as Business International Corporation and the International Country Risk.

Table 5. Enforcement of Investor and Creditor Rights

Enforcement	Definition or Comment
Efficiency of judicial system	How does the integrity and efficiency of the system affect business? This variable ranges from zero (no integrity) to ten (most integrity); reflects the average for 1980-83; and is based on the perceptions of foreign investors themselves.
Rule of law	Does a law-and-order tradition exist? This variable ranges from zero (no tradition) to ten (most tradition), and is based on the average for 1982-95.
Corruption	Do high government officials routinely expect bribes? This variable ranges from zero (rampant corruption) to ten (no corruption), and is based on the average for 1982-95.
Risk of expropriation	What is the risk of outright confiscation or forced nationalization? This variable ranges from zero (highest risk) to ten (negligible risk), and is based on the average for 1982-95.
Repudiation of contracts by government	What is the risk that a budget crisis or political change will take the form of a modified or repudiated contract? This variable ranges from zero (highest risk) to ten (negligible risk), and is based on the average for 1982-95.
Accounting standards	Index created by examination of company annual reports.

6. What indicators are used to measure economic outcomes?

In order to test a hypothesis -- that countries with weak investor/creditor protection have more highly concentrated ownership patterns as an offsetting factor -- the L&F authors calculated the ownership shares of both the ten largest firms and the ten largest private firms in a country. Sources for these shares included *Moody's International*, *CIFAR*, and publications from Price Waterhouse. The measures are:

- < the average percentage of common shares owned by the three largest shareholders in the ten largest non-financial domestic firms in a country
- < the average percentage of common shares owned by the three largest shareholders in the ten largest non-financial, privately-owned domestic firms in a country.

By "private," the authors do not mean that the firm is not publicly-traded on the stock market, although that is what the word "private" typically means. In their study, "private" simply refers to the fact that the State is not a known shareholder.

The authors also rely on use of the Gini coefficient to measure economic outcomes related to ownership concentrations. The data on Gini coefficients, either for 1990 or the most recently available, are from the new data set developed by Deininger and Squire at the World Bank and published in 1996.⁹

⁹ Klaus Deininger and Lyn Squire, "Measuring Income Inequality: a New Database," The World Bank. The dataset can be accessed on the Web at <http://www.worldbank.org/growth/dddeisqu.htm>

7. What do the data show for the forty-nine countries?

The L&F paper presents data for all forty-nine countries, but this report only considers the average ?score? or ?value? of each variable for the four legal tradition groups.

Table 6. Average Scores on Investor Protection

	Number of Countries	What Percentage Provide these Investor Protections?				
		One share equals one vote	Allow proxy by mail	Shares not blocked before meeting	Allow cumulative voting	Oppressed Minority Rights
Common Law	18	22%	39%	100%	17%	92%
French Civil	21	24%	9%	57%	19%	33%
German Civil	6	33%	17%	33%	17%	33%
Scandinavian	4	0%	25%	100%	0%	25%
All Countries	49	22%	22%	73%	16%	53%

Common law countries offer the best investor protections, although the evidence for this rests upon just three of the five indicators: they never block shares prior to a meeting, they nearly always allow for oppressed minority rights, and they are more likely to permit proxy by mail.

Two of the investor protections -- the one-share-one-vote principle and the provision for cumulative voting -- are relatively uncommon in any country, even common law countries.

Table 7. Summary of Average Scores for Investor Protections

	Number of Countries	What is the average minimum percentage of share capital ownership required to call an Extraordinary Shareholders Meeting?	What is the average value of the composite ? Anti-directors Index? ? (range 0 to 5)	What percentage of countries impose a required minimum for a mandatory dividend payment?
Common Law	18	9%	3.4	0%
French Civil	21	14%	1.8	33%
German Civil	6	5%	2.0	0%
Scandinavian	4	10%	2.5	0%
All Countries	49	11%	2.4	14%

On the basis of these three indicators, common law countries again are shown to offer the most investor protection. The minimum percentage of share ownership needed to permit calling an ESM is just nine percent. More tellingly, the composite index (which is comprised of the last four indicators in the table on the preceding page plus the first indicator in the table on this page) places common law countries firmly above all other traditions.

With respect to the composite index, ? Anti-directors Rights,? only the United States earned a maximum score of five marks. Three countries -- Belgium, Italy, and Mexico -- from the French civil tradition were the only countries to receive zero marks on this point.

The last indicator for investor protection -- a minimum dividend payment mandated -- is considered by the authors of ?Law and Finance? to be a ?remedial investor protection.? That is, they expect to see this particular protection in place when the other sorts of protections are weak. The data support their hypothesis. As the table on this page indicates, these mandated minimums are only found in French civil law countries.

Table 8. Average Scores for Creditor Protections

	Number of Countries	What Percentage Provide these Creditor Protections?			
		Preclude managers from unilaterally seeking protection from creditors by entering reorganization procedures	Do not place an automatic stay on assets during reorganization	Grant secured creditors top priority in getting paid off	Do not require that management remain in control of the operation during reorganization
Common Law	18	71%	71%	94%	76%
French Civil	21	42%	26%	68%	26%
German Civil	6	33%	67%	100%	33%
Scandinavian	4	75%	25%	100%	0%
All Countries	49	54%	48%	85%	43%

Generally, creditor rights are more common in all forty-nine than are investor rights. Once again, however, the common law countries earn the highest marks for creditor protections. **Note that averages conceal the variation within groups, e.g., the United States and Australia are among the most anti-creditor countries in the world by these four measures.** French civil law countries are also, once again, the lowest protectors of creditors.

Table 9. Average Scores for Remedial Protections for Creditors

	Number of Countries	What percentage of the countries provide the ? remedial? creditor protection that a minimum legal reserve is required as a percent of total capital?	Among the countries that do require a minimum legal reserve, what is the average level mandated?
Common Law	18	6%	0.100 of capital*
French Civil	21	81%	0.214 of capital
German Civil	6	100%	0.275 of capital
Scandinavian	4	75%	0.217 of capital
All Countries	49	55%	0.223 of capital

* = average is based on only one country: Thailand.

This last indicator of creditor protections, whether the country mandates a minimum legal reserve to avoid dissolution of an existing firm, is the remedial protection designated by the authors. Such legal reserve requirements protect creditors by placing a limit on how much of the capital can be stolen or otherwise squandered by management before creditors can step in. This remedial measure is of particular benefit to unsecured creditors.

In countries that afford creditors some or all of the other four protections, there should be little incentive to also provide the remedial protection. That, at least, is among the authors' hypotheses. The data, shown in the table on the preceding page, tend to bear that out. Only one common law country has the remedial protection and the reserve requirement is set at the relatively low level of only ten percent of total capital. By contrast, eighty-one percent of all French civil law countries, as well as seventy-five percent of all Scandinavian law countries, provide the remedial protection measure. Among those countries in those groupings that mandate a legal reserve, the average level of the reserve is set just above twenty percent of total capital.

The six German civil law countries are the most uniform in providing for this remedial creditor protection, with all of them on board. Among those six countries, the average minimum mandated is 27.5 percent of total capital. (Note: the levels at which legal reserves are set, if at all, are typical no matter which legal family is involved. However, the prevalence rate of these requirements is negligible among common law countries and high among all civil law countries.)

One qualification with respect to all the ? scores? is in order: the authors looked at information

available as of 1992-93. If any of the forty-nine countries has adopted new laws or regulations since that time, its ? score? or index value might no longer be relevant or accurate.

Measures of Enforcement of Investor/Creditor Protections: Rights as written into laws are one matter; the enforcement of those rights is another. Using the variables defined in an earlier tables, the authors rate each country?s enforcement on five different measures. The first two, judicial system efficiency and rule of law tradition, are directly related to the enforcement of protections. The other three indicators speak more broadly to the government attitude towards business.

Table 10. Data on Enforcement of Protections

	Number of Countries	What is the Average Rating Score on Each Enforcement Measure? (0 = no enforcement; 10 = maximum enforcement)				
		Judicial System Efficiency	Rule of Law Tradition	Absence of Corruption	Absence of Expropriation Risk	Absence of Contract Repudiation Risk
Common Law	18	8.15	6.46	7.06	7.91	7.41
French Civil	21	6.56	6.05	5.84	7.46	6.84
German Civil	6	8.54	8.68	8.03	9.45	9.47
Scandinavian	4	10.00	10.00	10.00	9.66	9.44
All Countries	49	7.67	6.85	6.90	8.05	7.58

As in the case of legal rules and protections, the level of legal enforcement differs across legal family groups. However, the enforcement measures clearly put the Scandinavian group countries on top, with the German civil law countries firmly in second place. As before, the French civil law countries post the lowest average scores. With respect to legal enforcement, then, the common law countries do not rule the roost -- although they maintain their edge over French civil law countries.

The next table shows the average ratings received for the accounting standards in a country.

Table 11. Legal Traditions and Accounting Standards

	How do the groups compare on accounting standards?	
	Average Score (range 0 to 90)	Notes
Common Law	69.62	Data not available for Ireland, Kenya, Pakistan, Sri Lanka, Zimbabwe.
French Civil	51.17	Data not available for Ecuador, Indonesia, Jordan.
German Civil	62.67	All countries included.
Scandinavian	74.00	All countries included.
All Countries	60.93	

Unlike the indicators for enforcement measures, the ratings for accounting standards place common law countries ahead of German civil law countries. However, as with enforcement, the average ratings for accounting standards put Scandinavian countries in first place and French civil law countries trailing the others.

Comparisons of concentration of ownership measures and the legal tradition: The L&F authors hypothesize that countries which afford weaker protections to investors or creditors will witness a higher concentration in the ownership of corporations. The rationale is that, if individual investor or creditor protections are relatively weak, then the perceived risks of investment are lowered if individuals aggregate large chunks of the company's shares or assets. This can be thought of as a compensating or offsetting development.

In countries with relatively strong investor or creditor protection, individuals will be less concerned with gaining leverage through accumulation of a large share. They will be more likely to diversify their investments among many corporations. (For individuals, one may also read ?bank.?)

Table 12. Ownership Shares of Firms and Legal Traditions

	Number of Countries	What is the Average Ownership Share of the Three Largest Shareholders in the Ten Largest Firms?	
		Non-financial Domestic with the Government Ownership Shares Excluded	Non-financial Domestic Private Only (<i>i.e.</i> , Government not a shareholder)
Common Law	18	41%	42%
French Civil	21	45%	55%
German Civil	6	31%	33%
Scandinavian	4	32%	33%
All Countries	49	40%	45%

The L&F authors used several control variables such as per capita income level, size of total GDP, and the Gini coefficient in order to gauge the relationship between legal tradition origin and ownership concentration patterns. Their tests of statistical significance support the following conclusions:

- < Countries with better accounting standards and rule of law traditions have lower ownership concentration rates.
- < Countries with better shareholders' anti-directors rights have lower ownership concentration rates.
- < The one-share-one-vote principle, seen as an investor protection, did not test significant with respect to ownership concentration.
- < Measures of creditor rights did not test significant with respect to ownership concentration rates.

As the authors note, the endogeneity of several of their independent variables -- particularly the accounting standards score -- cannot be ruled out of bounds. For example, if a country happened to have a small stock market and heavily concentrated ownership, it might have little incentive to develop full-blown, state of the art accounting standards.

Some calculations using average stock market capitalizations: An alternative way to sort the countries is to consider the number of investor protections offered and compare the average size of stock markets in each country. These calculations are shown in the next table. (It is also of interest to consider the relative number of protections offered to investors and creditors, and the possible impact this has on stock market size, but I have placed those comparisons and calculations in an appendix.)

Table 13. Investor Protections & Average Stock Market Capitalizations¹⁰

	Number of Countries	What is the average value of the stock market capitalization expressed as a percentage of GDP as of 1993?
All five protections	1	83%
Four	9	101%
Three	14	83%
Two	14	30%
One	5	36%
None of the protections	3	36%
All Countries	46	62%

Although the table has apparently wide differences in market caps, a standard analysis of variance and F-tests do not support the six-category framework. In other words, **there is about as much variance in stock market size within these six groups as there is between the six groups.**

However, if the countries are put into two groups -- countries offering at least three protections vs. countries offering two or fewer protections -- then the analysis of variance establishes a significant difference in the average stock market capitalization.¹¹ Therefore, it appears that the L&F paper has developed indicators which can ?predict? stock market capitalization size. It appears that three out of

¹⁰ Market capitalization as a percent of GDP as of year-end 1993 was used because the ? Law and Finance? authors relied upon 1992-93 information to derive their own scores. All market capitalization figures, expressed in U.S. dollars were taken from the International Finance Corporation's *Factbook* for 1995. GDP data were taken from either the *Factbook* or a World Bank source.

¹¹ At both the 0.05 and 0.01 significance levels.

five ?investor protections? are the ?critical mass? for the development of an above-average sized stock market.

The income level of a country is another possible ?predictor? of the stock market capitalization. Data on per capita incomes in the forty-six countries are available from the World Bank's *Social Indicators of Development*, and the countries can be sorted into income levels by Bank criteria.¹² The next table shows the calculations of average stock market size for countries sorted by income level.¹³

Table 14. Income Level and Stock Market Capitalization

Income level as scored by the World Bank for 1993	Number of Countries	What is the average value of the stock market capitalization expressed as a percentage of GDP as of 1993?
High Income	23	74%
Upper Middle Income	10	76%
Lower Middle Income	7	39%
Low Income	6	23%
All Countries	46	62%

Despite the large apparent differences between high or upper middle income countries and those of lower incomes, the same analysis of variance used earlier does not show that these categories are significant. The amount of variance in stock market capitalization is about as large within the income-level categories as it is between the categories. The higher average market capitalizations among the richer countries reflects the fact that their group contains a disproportionate share of the extreme outliers, *i.e.*, those countries whose stock market capitalization is greater than two hundred or three hundred percent of GDP.¹⁴

¹² Per capita income data are also available from the *Penn World Tables* developed by a team from the University of Pennsylvania, and the numerical levels can differ significantly from World Bank data. However, the distribution or ranking of countries under the World Bank's *Atlas* method and the *Penn World Tables*'s purchasing-power-parity adjusted methods are not significantly divergent.

¹³ For 1993 data, the World Bank ranked countries as high income if their per capita GDP was \$8,626 or higher; upper middle income if \$2,786 to \$8,625; lower middle income if \$696 to \$2,785; and low income if \$695 or less.

¹⁴ There are eight countries in the sample of forty-six with a market capitalization greater than one hundred percent of GDP. If those countries are excluded, the average market capitalization for all countries (just the thirty-eight remaining) drops to thirty-six percent from sixty-two percent. The nineteen high income countries then have an average stock market capitalization of 46 percent, not 74; the upper middle income countries have an average of 25 percent, not 76; the lower middle income countries have an average of 28 percent, not 39; and the low income countries have the same average market capitalization of 23 percent as in the broader sample. An analysis of variance

These data, limited as they are, suggest that there is no consistent relationship between the income level of a country and the size of its stock market capitalization.

Some remarks about the data on market capitalization: Using stock market capitalization as a percentage of GDP as an indicator is a bit dicey. Given that stock markets are cyclically volatile, the year 1993 might have been a representative year for some countries and a misleading one for others. A more complete analysis might have considered using an average value over a few years. (Of course, the presence of some correlation between different markets with respect to prices mitigates some of the concerns raised by this point.)

It is also worth noting that ?economic development? or ?financial development? does not necessarily coincide with an ever increasing stock market capitalization as a percentage of GDP. There is no ?golden rule? or optimal value for stock market capitalization as a percentage of GDP. The United States, with a market capitalization of eighty-three percent of GDP in 1993, and Germany, with one of twenty-seven percent the same year, are both prosperous and advanced economies.

All things being equal, however, a rise in stock market capitalization is a signal of more capital available for investment. If the investment takes places, of course, GDP should also grow -- and keep the ratio between market capitalization and GDP steady.

The analysis of different groups of countries in this report supports the following very tentative conclusions:

- < Stock market capitalization appears to be *neither helped nor hindered* by the apparent bias or neutrality in a legal system?s attitude towards shareholders and creditors. (See the third appendix for details.) Countries which provide the same number of legal protections to both shareholders and creditors can have stock markets as large as those that lean one way or the other.
- < Stock market capitalization appears to be boosted by the number of shareholder protections offered in a country?s legal system, regardless of the strength of creditor protections in the statutes.
- < As a matter of policy prescription, the presence of three out of five potential investor protections is apparently a ?critical mass? for increased stock market capitalization. This relationship, if supported by further tests of the data, could be the basis for charting a country?s financial and legal reform process.

of the sample of just thirty-eight countries does show that those categories are significant, at least at the 0.05 level. The categories are not significant at the 0.01 level for either the 38 or 46 country sample.

- < The particular investor and creditor protections identified by the "Law and Finance" authors are generally useful, but not necessarily universal. Policy reformers in low-income countries should proceed with open minds and sensitivities to the nuances of development. After all, Switzerland only provides three of the nine investor/creditor protections in the "Law and Finance" paper, and few would think of the Swiss as either hostile to investment or thin in wallet.

8. How Can USAID Use the L&F Data and These Findings?

Improved Agency Strategic Planning. By strengthening the incorporation of measures to increase broadly-based economic growth, and by better utilizing the relative advantages of IFC versus USAID activities, the Agency will achieve better results from assisting the development of stock markets.

Improved Agency Projects. By using the ?Menu? of measures to support stock markets in developing countries, the Agency can design projects which will stand a better chance of increasing broadly-based economic growth and of avoiding the problem that funds support activities that would either have been undertaken anyway, or are better accomplished with private sector financing. By understanding, and further analysis of, the findings from the ?Law & Finance? paper, the Agency can design projects that would be expected to generate a more egalitarian distribution of financial assets.

In the Philippines, several investor protections are already written into the law, but enforcement of these rights is relatively weak. Starting in 1993, USAID provided substantial assistance to the Philippines in order to help the stock market flourish. The centerpiece of the strategy was to promote transparency in regulation, but the other selections from the reform menu -- upgrading financial sophistication, cutting taxes on capital gains, turning the regulators and broker-dealers into SROs, and automating the trading system -- also played prominent roles.¹⁵ Conspicuously absent from the project were efforts to make share ownership more widespread in the economy through strengthened enforcement of existing investor protections. As an IMF report indicates, the government?s main activity in financial sector development continues to be cutting taxes and other tax changes.¹⁶

In India, where less than three-tenths of one percent of the population owns any shares in stock market¹⁷ (including indirect ownership through mutual funds), there are relatively few investor protections are offered. The enforcement of existing rights is usually fairly good, which suggests that

¹⁵ CDIE, ? Developing the Philippines? Capital Market,? *CDIE Impact Evaluation*, June 1999. It?s worth noting that even the CDIE?s own assessment of the reforms -- which is very upbeat and positive -- acknowledges that the overhaul of the SEC has not solved the main problem, which is bottlenecks for IPOs. See page 12 of the evaluation.

¹⁶ International Monetary Fund, ? Philippines- Supplementary Memorandum on Economic and Financial Policies,? January 20, 1999.

¹⁷ CDIE, ? Developing the Capital Market in India,? *CDIE Impact Evaluation*, April 1999, page 5.

legal reforms to expand investor rights would have a good pay-off. USAID has been assisting the stock markets in India since at least 1992, with substantial resources dispersed in programs very similar to the efforts in the Philippines. The notable exception to work in India has been the component designed to strengthen the mutual funds industry, which is attuned with broadly-based economic growth. A useful complement to that component would have been assistance in legal reforms to protect small shareholder rights.

Kenya offers investor protections at the "critical mass" level of three from the L&F list, but enforcement of those investor rights is relatively weak. USAID has offered assistance to expand the stock market for more than a decade, with the main achievement being a more transparent market and regulatory agency. This activity had the collateral impact of strengthening the enforcement of minority shareholders' rights, but a more direct approach to this problem would have been even more successful.

Improved Agency Indicators. By focussing capital markets assistance on increasing the broadly-based nature of asset ownership, USAID will better achieve development goals. With programs directly aimed at de-concentrating stock ownership, new indicators will be used to measure progress. For example, in the FY2000 R4 for India, the Agency uses four indicators to measure progress in improving financial markets: (1) better price transparency; (2) reduced clearing/settlement time; (3) a higher "index of capital market development"; and (4) a functioning securities depository system.¹⁸ Some of those indicators aim directly at broadly-based economic growth, while others appear to be more in the IFC's bailiwick. Even better indicators to use would include: (1) reduction in the concentration of share ownership and (2) stronger enforcement of individual shareholder rights.

Improved Agency Analysis. In addition to directly affecting program design, the concept of how the legal tradition affects the financial development of a country would be a useful tonic for USAID analysis of financial markets. For example, in a 1997 CAER paper, Pieper and Vogel provided an overview of the integration of the Mexican and U.S. securities markets¹⁹, but completely ignored the issues raised by the differing legal traditions or the fact that Mexico has been offering none of the investor or creditor protections listed by the L&F paper. Pieper and Vogel comment upon the impact of limiting foreign ownership of equity shares, but that is the only factor considered to be a limit on U.S.-Mexican stock market integration. (See pages 25-27 of Pieper and Vogel.)

Any analysis of integration prospects would be strengthened by acknowledging the legal differences in the two countries. It would also be worthwhile to consider the discrepancies, if they exist,

¹⁸ Indicators listed in the CDIE Online R4 Database.

¹⁹ Paul B. Pieper and Robert C. Vogel, "Stock Market Integration in Latin America," IMCC, *Consulting Assistance for Economic Reform (CAER) Paper*, October 1997.

with respect to the legal enforcement of shareholder rights in each country. Pieper and Vogel should have addressed the point that on each measure of enforcement, Mexico scores lower than the United States. (Table 7 in the L&F paper.)

Another paper that would have benefited from an examination of the legal traditions behind financial markets is the survey of money markets in Southern Africa by Schuler *et al.* from 1997.²⁰ One purpose of the paper was to correct for an information gap concerning money markets in the region (page 1 of the paper). The authors laud both the South African and Zimbabwean stock markets as either remarkably large or sophisticated (pages 16 and 40). It would have been more useful to explain how that happened when neither country offers many shareholder rights, and when neither country scores well on the enforcement of rights.

²⁰ Kurt A. Schuler, Dennis R. Sheets, and David W. Weig, "Money Markets in Selected Southern African Countries," IMCC, *Consulting Assistance for Economic Reform (CAER) Paper*, November 1997.

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ANNEXES 1 - 3

A-1. Comparison of the L&F Data Set with the IFC Ratings

The International Finance Corporation (IFC), in its annual *Factbook*, provides measures of investor protection and market risk. For example, three benchmarks are offered from Global Securities Consulting Services, Inc., which relate to:

- < **GSCS Safekeeping Benchmark** - efficiency in collection of dividends, reclamation of withholding taxes, and protections in the event of corporate actions.
- < **GSCS Settlement Benchmark** - efficiency of the settlements mechanism and how commonplace are failed transactions
- < **GSCS Operational Risk Benchmark** - takes into account, although in varying weights, the first two benchmarks, *plus* other factors, *e.g.*, the degree of a market's compliance with recommendations of the Group of Thirty, *force majeure* risk, and counterparty risk.

All three benchmark scores range from a worst case of zero to a best case of one hundred. Although available for only twelve countries -- all of them considered to be *emerging markets* -- those countries are all part of the *Law and Finance* forty-nine. These benchmarks are available for 1995, but 1993 data are shown in order to make them comparable to the *Law and Finance* group.

Table A1. Comparison of IFC Ratings with L&F Data

	GSCS Benchmarks for 1993			Law and Finance? Investor Protection Score (0 - 5)	Mandatory Minimum Dividend?
	Safekeeping	Settlement	Operational Risk		
Argentina	91.6	89.1	69.4	4	No
Brazil	91.4	90.9	68.9	3	Yes
Chile	93.2	91.6	71.7	3	Yes
Greece	67.2	38.3	42.5	1	Yes
India	76.4	10.0	33.5	2	No
Indonesia	89.7	49.1	47.2	2	No
South Korea	87.5	65.9	69.7	2	No
Malaysia	93.2	41.8	45.9	3	No
Mexico	92.3	87.2	68.3	0	No
Portugal	91.7	77.7	71.7	2	Yes
Thailand	92.3	86.3	69.0	3	No
Turkey	92.0	87.1	66.8	2	No

Although the first two GSCS benchmarks on safekeeping and settlement are of interest, the

operational risk benchmark probably offers a more useful summary measure. If the countries are grouped by their levels of investor protection -- as measured by the *Law and Finance* authors -- the average operational risk scores from the GSCS are as follows:

Table A2. Investor Protections & Benchmark Scores Compared

Number of Investors Protections Offered, as Scored by the <i>Law and Finance</i> paper	Average GSCS Benchmarks for 1993			Number of Countries in the Group
	Safekeeping	Settlement	Operational Risk	
All five	n.a.	n.a.	n.a.	0
Four	91.6	89.1	69.4	1
Three	92.5	77.7	63.9	4
Two	87.5	58.0	57.8	5
One	67.2	38.3	42.5	1
None	92.3	87.2	68.3	1

The rank order of these average benchmark scores -- remembering that the sample *groups* are extremely small -- conforms with the expectations with respect to the scores from the *Law and Finance* paper. The only exception is the country -- Mexico -- which provides none of the five investor protections identified by the *Law and Finance* paper, yet has safekeeping and settlement scores comparable to the countries which provide three or four investor protections. Even Mexico's operational risk score is out of line, from that perspective.

Anomalies such as these do not undercut the *Law and Finance* paper's broad conclusions. Indeed, it is possible that the lack of specified investor protections has spurred Mexico to establish better than average means for safekeeping and settlement -- as a means of compensation.

When the same average GSCS benchmarks are calculated for the countries grouped by legal family tradition, the pattern in the next table emerges:

Table A3. Legal Traditions & IFC Ratings Compared

Legal Family Tradition, as Scored by the ?Law and Finance? paper	Average GSCS Benchmarks for 1993			Number of Countries in the Group
	Safekeeping	Settlement	Operational Risk	
Common law	87.3	46.0	49.5	3
French civil	88.6	76.4	63.3	8
German civil	87.5	65.9	69.7	1
Scandinavian	n.a.	n.a.	n.a.	0

Among the dozen countries for which GSCS benchmarks are available from the IFC, the strong investor protections are no longer the province of the English common law countries. French civil law countries show much more fortitude by these scores. All of this appearance might be explained away by the simple fact that the GSCS benchmark countries are a small and select group of the ?Law and Finance? forty-nine countries. Indeed, the three particular countries in this GSCS sample that are from the common law tradition offer a below-average number of investor protections by the lights of the ?Law and Finance? paper itself. The average number of protections is 3.4 for common law countries (out of five marks); Malaysia and Thailand offer three, and India offers just two investor protections.

In the same way, the French civil law countries found in the GSCS benchmark sample tend to be among those who offer an above-average number of investor protections. The average number of protections is 1.8 for French civil law countries; only Greece (1) and Mexico (0) fall below that standard. Indeed, Argentina offers four out of five protections, while Brazil and Chile offer three apiece.

A-2. Comparing the L&F Data with the *Euromoney* Country Risk Ratings

Another ranking system which is of interest is the *Euromoney* Country Risk scores, issued semi-annually by *Euromoney* magazine. These scores do not relate directly to the ?Law and Finance? scores in the same way as the GSCS benchmarks. The comparison below asks a broader question: how well do the ?Law and Finance? scores on investor protections signal a general perception about a country and its investment climate?

Euromoney country risk scores range from zero to one hundred, and are comprised of economic performance (25 percent); political risk (25); measures of debt (20); credit ratings (10); and access to finance and capital (20). (See the March or September issue of *Euromoney* from any year for complete details on how the scores are derived.)

In the next table, the average *Euromoney* score from September 1993 is compared for each group of countries, sorted by the number of total investor protections offered (ranging from zero to nine).

Table A4. L&F Data and *Euromoney* Ratings Compared

Number of Investor & Creditor Protections Offered, as Scored by the ?Law and Finance? paper	Average <i>Euromoney</i> Country Risk Score, September 1993	Number of Countries in the Group
All nine	n.a.	0
Eight	74.99	3
Seven	64.95	8
Six	67.30	7
Five	85.06	9
Four	76.01	8
Three	75.47	3
Two	78.97	6
One	60.38	1
None of the protections	60.37	1
All countries*	74.14	46

* = three countries - Venezuela, Jordan, and Sri Lanka - are excluded because the creditor protection score is not given.

The relationship between the number of protections offered by a country, *à la* the ?Law and

Finance? paper, and the risk of investing, *à la* the *Euromoney* scores, is not readily apparent. Countries which offer a greater number of investor and creditor protections are not touted more highly by the *Euromoney* country risk scoring system.

This lack of a positive correlation, even if it had been expected, reflects the nature of the relationship between *Euromoney* country risk scores and the income level of a country. For whatever reason, there is a high degree of correlation between the income level of a country and its country risk score. There were 170 countries in the September 1993 *Euromoney* country risk score rankings,²¹ and no high-income country (as classified by the World Bank) fell lower than 35th. Similarly, the bottom thirty-five countries in the *Euromoney* rankings are among the poorest in the world.

As the L&F authors note, their measures of investor and creditor protections bear either no relationship or only a weak relationship to the income level of a country. Given that the *Euromoney* measures *are correlated* with income level, it is easy to see how they are not correlated with the number of investor or creditor protections.

What should be made of this finding? One approach is to decompose the *Euromoney* country risk score. The component ?political risk? appears to be most closely related to the ?Law and Finance? investor and creditor protections.²² In the table on the next page, the average political risk scores (which range from zero to twenty-five for each country²³) are calculated for different groups of

²¹ Ten more countries have been added to the *Euromoney* rankings since that time, but 1993 numbers are used here in order to compare with the L&F analysis.

²² *Euromoney* arrived at its political risk scores by polling political risk analysts, risk insurance brokers, and bank credit officers. Each country was given a score of zero -- no chance of payments being made -- to ten -- no risk of non-payment. Countries were scored in comparison both with each other and with previous years. In the poll, ?country risk? is defined as the risk of non-payment, or non-servicing of payments, for goods, services, loans, trade-related finance, and dividends; as well as the non-repatriation of capital. This score does not take into account the creditworthiness of individual counterparties in each country. Political risk carries a weight of twenty-five percent in the total *Euromoney* country risk score.

²³ The range of potential ?political risk? scores is zero to twenty-five. For the edition published in September 1993, the range of actual values for all 170 countries ran the gamut from 0.00 for Somalia to a full 25.00 for Switzerland.

countries.

Table A5. L&F Data and Political Risk Compared

Number of Investor & Creditor Protections Offered, as Scored by the ? Law and Finance? paper	Average <i>Euromoney</i> ? Political Risk? Score, September 1993	Number of Countries in the Group
All nine	n.a.	0
Eight	18.26	3
Seven	15.93	8
Six	16.80	7
Five	21.19	9
Four	19.02	8
Three	18.53	3
Two	19.90	6
One	15.43	1
None of the protections	16.76	1
All countries*	18.09	46

* = three countries - Venezuela, Jordan, and Sri Lanka - are excluded because the creditor protection score is not given.

Virtually the same pattern of average ?political risk? scores is seen with respect to number of investor and creditor protections as was seen in the case of overall ?country risk? scores. This is not surprising. For the group of forty-six countries in the sample, the correlation between the total ?country risk? score and the ?political risk? score was 0.96.

Making this particular comparison results in a few interesting cases. For example, the only country which merited a perfect twenty-five points -- signifying the lack of any political risk for investors -- was Switzerland. At the same time, Switzerland provides only two of the nine investor and creditor protections identified by the L&F paper. Pakistan is another interesting case in this context. The L&F authors score Pakistan highly, with eight of nine protections offered. However, the *Euromoney* ?political risk? score is a relatively anemic ten points out of twenty five.

The divergence of ratings between the ?Law and Finance? paper and the *Euromoney* country risk scores suggests that the nine investor and creditor protections identified are neither sufficient nor necessary presences in a country for investor risk to be diminished.

The next table presents the calculations of average *Euromoney* country risk score when the

countries are sorted by legal tradition family.

Table A6. Legal Traditions and the *Euromoney* Risk Scores Compared

Legal Family Tradition, as Scored by the "Law and Finance" paper	Average <i>Euromoney</i> Country Risk Score, September 1993	Number of Countries in the Group
Common law	71.63	18
French civil	63.75	21
German civil	92.62	6
Scandinavian	91.27	4

In the groupings of countries by legal tradition family, the pattern of average *Euromoney* country risk scores is more in line with expectations. Common law countries post higher scores than French civil law countries. The dominance of both German civil and Scandinavian law countries flows directly from the fact that both groupings are predominantly or wholly comprised of high-income countries.²⁴

Another factor to bear in mind is that the pattern of scores *for enforcement measures rather than investor and creditor protections* as seen in the L&F paper, when countries are sorted by legal tradition family, has a close fit to the *Euromoney* country risk scores. In the cases of enforcement measures such as absence of expropriation risk, absence of contract repudiation risk, and absence of corruption, the German civil and Scandinavian law countries posted higher marks than either the common or French civil law countries (see table on page - - -). Clearly, the *Euromoney* country risk scores are more reflective of enforcement efficacies than the particulars of a country's statutes.

²⁴ The same pattern of average scores grouped by legal tradition families is seen when "political risk" scores are used: Common law country average 17.48 points; French civil 16.33; German civil 23.45; and Scandinavian 22.07.

A-3. Bias or Neutrality with Respect to Investors & Creditors

The L&F authors state that correlation analysis does not support the possibility that some legal traditions protect investors but not creditors. They argue that countries/groups of countries either protect both investors and creditors relatively well, or protect neither investors nor creditors relatively well. In short, we have no systematic evidence that legal rules discriminate between investor types, except that German civil law countries are partial to secured creditors. (page 26)

The issue of legal preferences for either investors or creditors is of considerable interest. How can the judgment of neutrality or preference be settled? In *Law and Finance*, the authors have five indicators of investor protection, which they combine into the *anti-directors index*. Each country is scored by a whole number between zero and five, depending upon whether a particular protection exists. On the creditor side, there are four indicators of protection. (The fifth indicator, which the authors treat as a *remedial* indicator, is being ignored here.) The authors do not calculate a composite for creditors, but that is easily done. Each country can be assigned a score, in whole numbers between zero and four. The number reflects whether each protection indicator exists.

A comparison is straightforward. How close are the two scores? There is an asymmetry, with investor protections numbering five and creditor protections numbering four. However, the following sorting criteria are suggested by the data:

- < if the number of protections is equal, or only one higher for investors, it is neutral
- < if the country grants at least three more protections to investors than to creditors, it is relatively pro-investor
- < if the country grants at least two more protections to creditors than to investors, it is relatively pro-creditor.

Countries which do not fall into one of those three categories are considered to be *ambivalent*. On the basis of the three criteria, the following four groups of countries can be identified, with three countries -- Sri Lanka, Jordan, and Venezuela -- excluded because data on creditor protections was not completely available. In each column, the countries are listed in descending order of the total number of protections granted. For example, in the *evenhanded* column, Hong Kong, Pakistan, and the United Kingdom all offer high protection to both investors and creditors, *i.e.*, each country provides four protections to each side. Mexico, at the bottom of the column is *evenhandedly* unprotective, *i.e.*, it assigns zero protections to both sides.

Table A7. Bias or Neutrality Between Investors and Creditors

? Even-handed? or Neutral (21)	Pro-Investor (5)	Pro-Creditor (7)	? Ambivalent? (13)
Hong Kong Pakistan United Kingdom New Zealand South Africa Denmark Thailand Chile Japan Norway Taiwan Netherlands Spain Sweden Turkey Finland Portugal Greece Switzerland Colombia Mexico	United States Philippines Canada Australia Argentina	Ecuador Egypt Indonesia India Germany Italy Belgium	(tilt to investors) Ireland Brazil France Peru (tilt to creditors) Zimbabwe Kenya Singapore Israel Malaysia Nigeria South Korea Austria Uruguay

How do the measures of neutrality or bias fit with indicators of stock market size? For a measure of stock market size that is comparable across countries, the market capitalization as a percentage of GDP was chosen.²⁵ In the table on the following page, the average market capitalizations are shown for each group of countries.

²⁵ Market capitalization as a percent of GDP as of year-end 1993 was used because the ? Law and Finance? authors relied upon 1992-93 information to derive their own scores. All market capitalization figures, expressed in U.S. dollars were taken from the International Finance Corporation's *Factbook* for 1995. GDP data were taken from either the *Factbook* or a World Bank source.

Table A8. Bias/Neutrality versus Stock Market Capitalization

	Number of Countries	What is the average value of the stock market capitalization expressed as a percentage of GDP as of 1993?
? Even-handed?	21	74%
Pro-investor	5	61%
Pro-creditor	7	25%
? Ambivalent?	13	65%
All Countries	46	62%

Even though the ?pro-creditor? countries have an average stock market size less than half the countries in other groups, a standard analysis of the variance for this sample does not establish that the categorical groups are significantly different. There is about as much variance in stock market size within these four groups as there is between the four groups. Indeed, even if the countries are sorted into two camps -- ?pro-creditor? and ?all others? -- variance analysis does not support the significance of that category.